

MEETING NOTES**MONTGOMERY WATSON**

APR 13 1998

Date: April 13, 1998**Date of Meeting:** April 8, 1998**Time:** 1:30 p.m.

EPA Region 5 Records Ctr.

Location: Forest Preserve District Office
185 Spring Street, Glen Ellyn

248083

Attendees: Joe Benedict, Forest Preserve District (FPD)
Jerry Hartwig, FPD
Michael Bellot, U.S. EPA
Munoj Mishra, Tetra Tech.
Peter Vagt, MWA
Walter Buettner, MWA**Subject:** Review and Planning Meeting for 1998 Site Activities
Blackwell Landfill NPL Site

A meeting was held at the Forest Preserve District at 1:30 p.m. on Wednesday, April 8th, 1998 to review project history, discuss recent U.S. EPA comments on submittals, and to schedule site activities for 1998. The meeting time and date had been selected so that representatives of all interested parties could attend. At the last minute, Rick Lanham of the Illinois Protection Environmental Protection Agency was unable to attend or participate by conference call.

The discussion during the meeting followed the agenda. A copy of the agenda is attached along with several other hand outs. The following action items were developed at the close of the meeting.

Action Items:

1. Quality Assurance Project Plan (QAPP)
 - 1.1. Montgomery Watson will submit revisions to U.S. EPA and IEPA by April 17, 1998
 - 1.2. U.S. EPA will review and respond by May 5, 1998. (U.S. EPA approval will be required before sampling proceeds).

2. Reports
 - 2.1. The First Round Quarterly Groundwater Monitoring Report will be submitted to the Agencies by April 22, 1998
 - 2.2. The end of April was set as the goal for the submittal of the Construction Completion Report. It is understood that the report will cover the Leachate Collection System and portion of cover that has been repaired to date. Reporting on the Completion of the remaining construction will follow in an addendum after the rest of the cover repair is completed, later in 1998.
3. North Storm-Water Trench and Sand Pond Investigation
 - 3.1. After the Agencies have approved the QAPP, a dry weather period will be selected for completing the sampling of soil from the north storm water trench and sand pond. U.S. EPA, IEPA, and Tetra Tech will be notified five working days in advance of the scheduled sampling.
 - 3.2. The goal is to set the sampling date to occur during the second half of May 1998.
4. Round 2 of Quarterly Groundwater Monitoring
 - 4.1. Sample collection will start with within 2 weeks of Agency approval of the QAPP. U.S. EPA, IEPA, and Tetra Tech will be notified five working days in advance of the scheduled sampling.
5. Natural Attenuation Study
 - 5.1. Sampling for the Natural Attenuation Study will be started within 2 weeks of QAPP approval. U.S. EPA, IEPA, and Tetra Tech will be notified five working days in advance of the scheduled sampling.
 - 5.2. The Report of results will include an evaluation of three transects, as requested in the U.S. EPA letter dated March 23, 1998. This will require the addition of MW-128S to sampling network in the next sampling event.
 - 5.3. We agreed that Montgomery Watson will not add monitoring well G-102 as suggested in the U.S. EPA comments, but will include a discussion and rationale of the barium concentration issue raised by U.S. EPA,
 - 5.4. The Natural Attenuation Report will be submitted to the Agencies by June 15, 1998
6. Completion of Cover Repair
 - 6.1. We will hold a pre-construction meeting at the site in mid-May 1998
 - 6.2. Construction will resume at the beginning of June 1998
 - 6.3. Construction should be completed in approximately 2 month.
7. Record of Decision
 - 7.1. We agreed that all parties would be working to complete work so that the Record of Decision (ROD) could be completed in 1998.

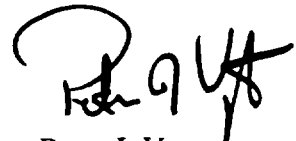
8. FPD's legal counsel should be copied on all future correspondence to and from the Agencies: Please add the following attorney to the "cc" list of correspondence:

David Barritt, Esq.
Chapman and Cutler
111 West Monroe
Chicago, IL 60603

Phone: (312) 845-3711
Fax: (312) 701-2361

Meeting Notes Prepared By:

Walter G. Buettner
Montgomery Watson



Peter J. Vagt
Montgomery Watson

Attachments

Agenda and Handouts from April 8, 1998 meeting

cc: Michael E. Bellot, U.S. EPA
Kurt Lindland, U.S. EPA Assistant Regional Counsel
Rick Lanham, IEPA
Munoj Mishra, Tetra Tech EM, Inc.
Joseph Benedict, Forest Preserve District
Richard Makarski, Chapman and Cutler
David Barritt, Chapman and Cutler

WGB/PJV/JH

Meeting Agenda
1:30 P.M., Wednesday, April 8, 1998
Blackwell Landfill NPL Site

Meeting will be held at the Offices of the Forest Preserve District of DuPage
County.

1. Summary of Project History
2. Agency Comments on the QAPP
3. Agency Comments on the proposed Natural Attenuation Study
4. Agency Comments on the draft O&M Plan
5. Schedule:
 - QAPP submittal
 - Reports in preparation
 - Investigation of North Stormwater Trench and Sand Pond
 - Round 2 of Quarterly Groundwater Monitoring
 - Natural Attenuation Study
 - 1998 Cap Repair

History of Blackwell Construction, Investigation, and Remediation

- 1960** The DuPage County purchased the Blackwell Site and over the next five years acquired more than 1,100 contiguous acres.
- 1965** Landfill construction initiated
- Eight Cells laid out. Two foot clay liner placed at bottom.
 - Four foot high berms constructed
 - Landfill proceeded by filling in cell, then covering with 1 to 2 foot clay cover, forming floor to next cell.
 - Unlined ninth cell added for along south border, for construction debris
- 1968** Illinois State Geologic Survey installed DV-1, leachate well through center of landfill and began monitoring leachate levels.
- 1973** The last load of refuse is buried at approximate elevation 800 feet above sea level. Approximately 2 million cubic yards of fill, 50 % refuse. FPD installed two leachate wells and eight perimeter monitoring wells and regularly recorded leachate and water levels. Samples collected and analyzed for pH and chloride with field instrumentation.
- 1975** Final contours completed, bringing maximum hill height to approximately 840 feet above sea level. Recorded leachate level show that elevations increased as additional fill was placed on the landfill, stabilizing between 720 and 760 in 1980. ISGS concludes that leachate level increases resulted from compaction of refuse.
- 1980 - 1985** FPD installed 50 monitoring wells and began annual sampling
- 1983** FPD began quarterly sampling for volatile organic compounds (VOCs).
- 1988** Blackwell Landfill proposed for NPL
- September 1989** U.S. EPA and FPD sign consent agreement to conduct RI/FS at Blackwell Landfill Site
- February 1990** Blackwell Landfill placed on NPL
- 1991 - 1992** Warzyn / Montgomery Watson conducts Remedial Investigation
- August 1992** Work begun of fast track Feasibility Study
- October 1992** First Draft Remedial Investigation Report submitted to U.S. EPA and IEPA

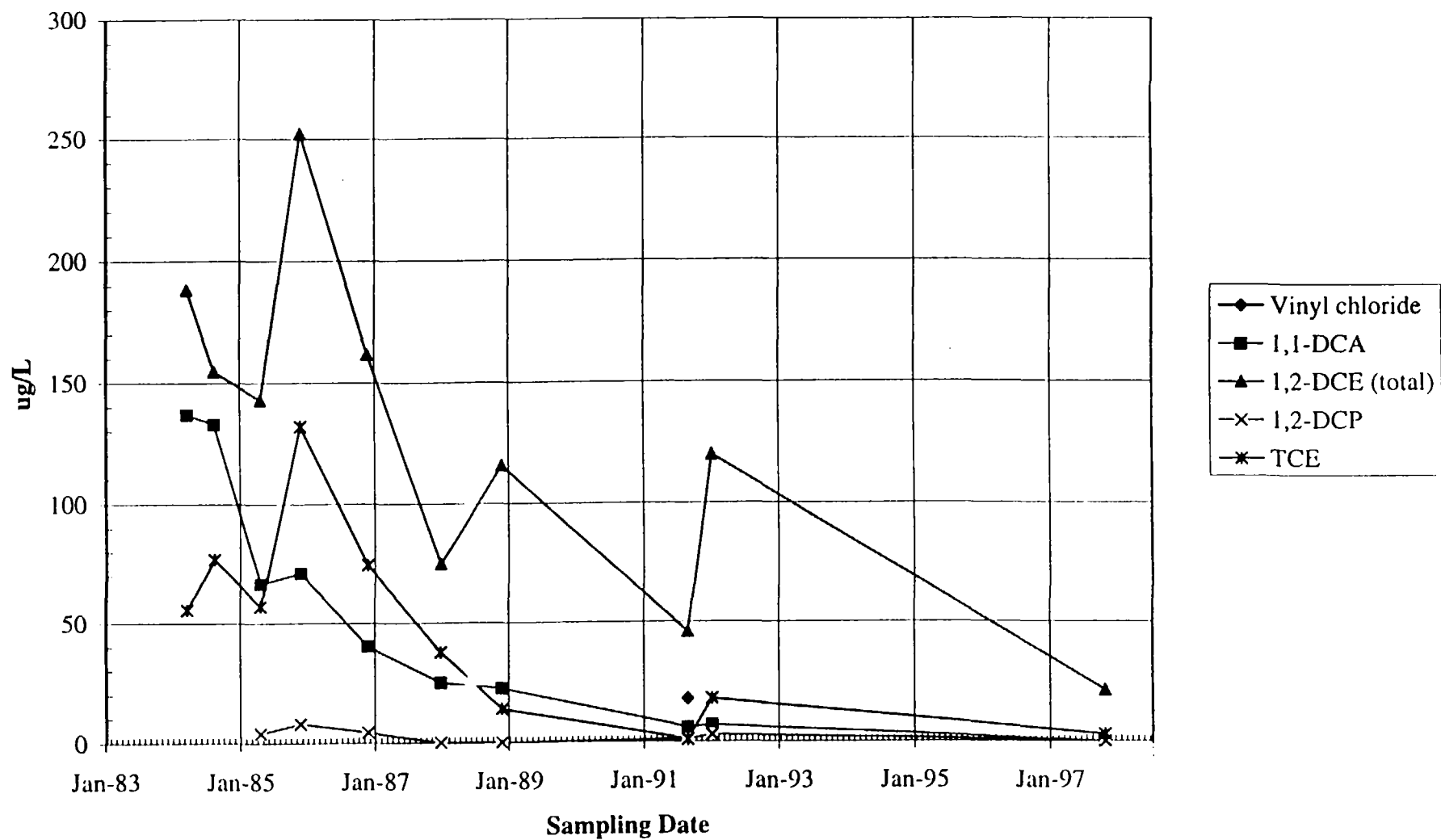
- December 1992** First Draft Feasibility Study Report submitted to U.S. EPA and IEPA. (Consecutive chapters had been submitted each month starting in September 1992)
- 1993** IEPA expressed concern that comments on the submitted Feasibility Study Chapters had not been fully responded to.
- 1994** U.S. EPA provided review comments (including IEPA comments) on the draft Remedial Investigation Report
- December 1994** Final Draft Remedial Investigation Report submitted to U.S. EPA and IEPA
- December 27, 1994** Remedial Investigation Report approved by U.S. EPA
- Spring 1995** IEPA expressed concern that the Remedial Investigation period was unusually dry so that the groundwater results might not be representative of aquifer conditions.
- June 1995** A round of groundwater monitoring is completed for inclusion in the Feasibility Study, to confirm groundwater impacts are contained and stable.
- June 1995** Second draft Feasibility Study submitted to U.S. EPA and IEPA
- Fall 1995** FPD and U.S. EPA discuss appropriate method to plan and conduct remediation at the Blackwell Landfill, for which no unacceptable risk has been defined
- January 1996** FPD signs consent order to conduct predesign investigations and to conduct remediation as response action. The agreement that FPD will repair cap, install leachate collection system, and U.S. EPA will issue a No-Further Action Record of Decision.
- Summer 1996** Work Plans developed to conduct pre-design investigation, repair cap and design and build leachate collection system.
- June 1996** Nine 36 inch diameter borings made through refuse to bottom of landfill and nine 12 inch leachate extraction wells are installed.
- July 1996** U.S. EPA approved Pre-design Work Plan and Pre-design investigation is initiated.

- 4
- January 1997** Pre-Design Investigation Report Submitted to U.S. EPA, proposing Phase II activities to better define the limits of fill and continuity of cover.
 - July 1997** Submit revised Pre-design report with revised Phase II Work Plan to U.S. EPA and IEPA
 - July 1997** U.S. EPA approved Phase II Pre-Design Investigation Work Plan, and Phase II investigation is initiated.
 - August 1997** Construction work initiated to repair landfill cap and construct Leachate Extraction system.
 - October 1997** Cap repair activities suspended until next construction season, pending acquisition of sufficient clay to complete cap.
 - November 10, 1997** Initiated quarterly monitoring program at 13 upper aquifer and 13 lower aquifer monitoring wells
 - December 1997** Completed construction of Leachate Collection System. Began stockpiling clay to complete cover repairs in 1998.
 - January 1998** Initiated three-month batch start-up of Leachate Collection system
 - January 1998** U.S. EPA requested that a Natural Attenuation Investigation be conducted
 - February 25, 1998** U.S. EPA provide comments on LCS O&M Plan
 - March 23, 1998** U.S. EPA provide comments on Natural Attenuation Plan
 - April 1, 1998** Batch start-up of Leachate Collection System completed. System ready to begin standard, designed operational schedule.
 - April 8, 1998** Meeting among U.S. EPA, IEPA, and FPD to resolve issues on QAPP and Natural Attenuation Study and to set up schedule for 1998 construction season.

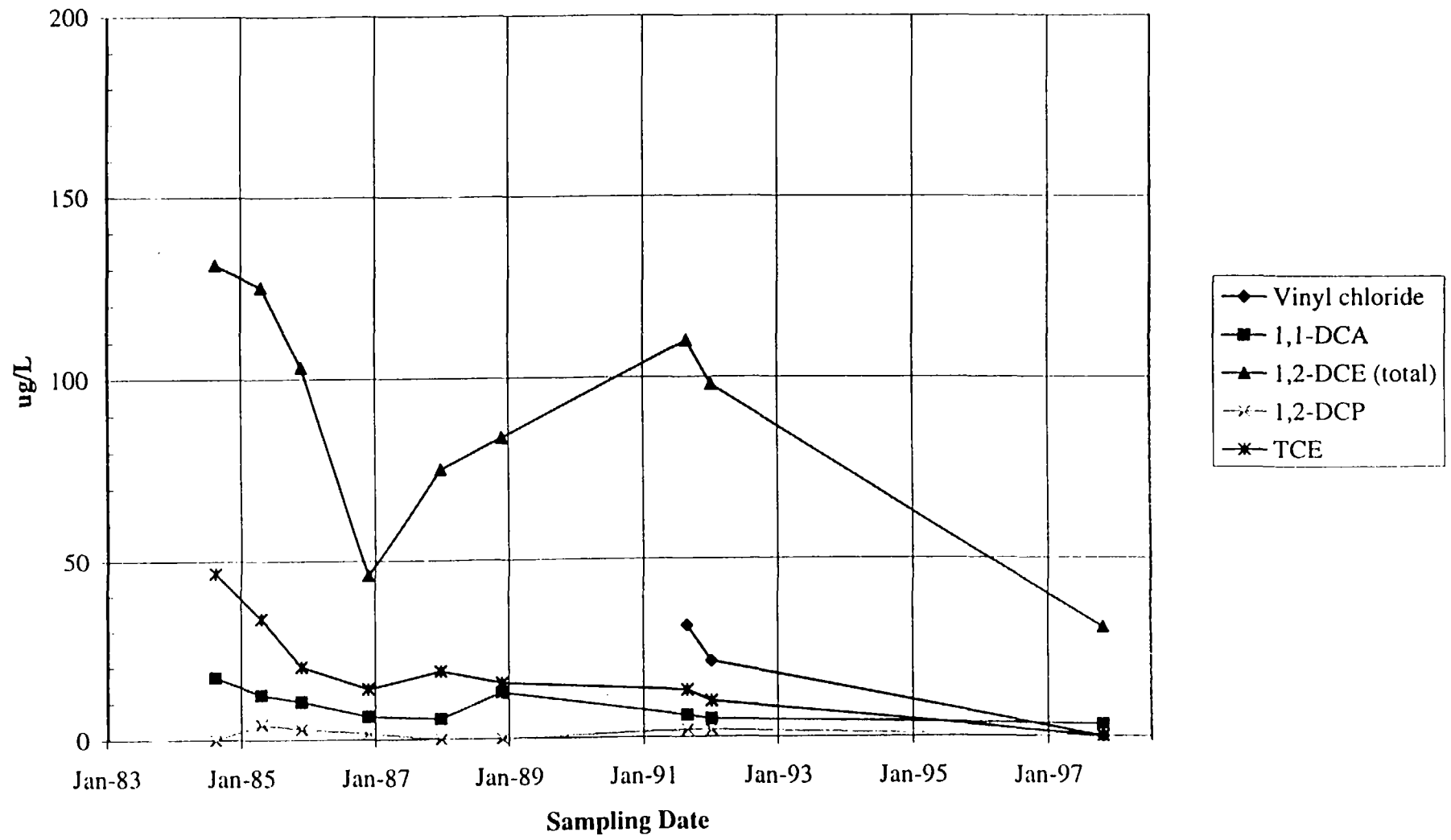
C:\Current\BW\History of Blackwell.doc

G-118S

Monitoring Well G-118S



Monitoring Well G-127



Selected Groundwater Monitoring Results at the Blackwell Landfill NPL Site

[illegible]

IDENTIFICATION AND SCREENING OF TECHNOLOGIES

The objective of the identification and screening of technologies process is to identify a manageable number of applicable remedial technologies which can then be assembled into remedial action alternatives (see Section 5). For the Blackwell Landfill site, this process consists of the following tasks:

- Identification of media of concern
- Development of Remedial Action Objectives
- Development of general response actions
- Identification of volumes or areas of media
- Identification and screening of remedial technologies
- Evaluation and selection of technology process options

The following subsections provide a discussion of each of these tasks.

4.1 IDENTIFICATION OF MEDIA OF CONCERN

The Baseline Risk Assessment and Ecological Assessment (summarized in Sections 3.3 and 3.4, respectively) evaluated potential risks to human health and the environment from potential exposure to contaminants present at the site. The evaluation considered land use conditions as they currently exist at the site. Potential future land use conditions, such as residential and commercial development, are not applicable for this site since the landfill is located in the Blackwell Forest Preserve. The Forest Preserve of DuPage County lacks the authority to sell any portion of the Blackwell Forest Preserve to a private party (Letter dated June 12, 1992 from R. Mork to R. Utt, Appendix A). Therefore, the risk assessment considered risks to be the same for both current and future land use scenarios.

* (The Baseline Risk Assessment and Ecological Assessment concluded that the media present at the Blackwell Landfill site do not pose an unacceptable risk at the site. However, the leachate contained within the landfill could represent a potential risk if leakage were to increase in the future. Therefore, the following two media are being addressed in this FS:

- Groundwater
- Leachate

Laboratory Parameters - GW	Montgomery Watson		USEPA
	Routine Plan	Submitted Plan	Proposed Changes
TCL Volatiles	X		
TCL Semivolatiles	X		
TAL Metals & Cyanide	X		
TOC		X	
BOD		X	
Nitrate-N		X	
Iron (total)	X		
Conservative Tracer (Chloride)	X		X
Sulfate	X		
Sulfide			X
Nitrite			X
Methane			X
Ethane			X
Ethene			X
Alkalinity	X		
Field Parameters - GW			
pH	X		
Temperature	X		
Conductivity	X		
Redox Potential	X		X
DO	X		X
Turbidity	X		
Alkalinity		X	X
Microbiological Parameters - Soil			
Total Heterotrophs		X	
Aerobic Hydrocarbon Degradors		X	
Acridine Orange Counts		X	
Phys/Chem Parameters - Soil			
Total solids		X	
TOC		X	
Nitrate-N		X	
Sulfate		X	
pH		X	
Monitoring Wells - Shallow Aquifer			
G-130	X	X	X
G-127	X	X	X
G-107S	X	X	X
G-122	X	X	X
G-144	X		X
G-118S	X		X
G-129	X		X
G-143	X		X
G128S			X
G-142	X		X
G-102			X
G-146			
G-145			
G-141			
G-139			
G-138			
G-135			
G-133S	X		
G-126	X		
G-123	X		
G-117	X		

**LIST OF DEEP MONITORING WELLS CURRENTLY SAMPLED ON A
QUARTERLY BASIS:**

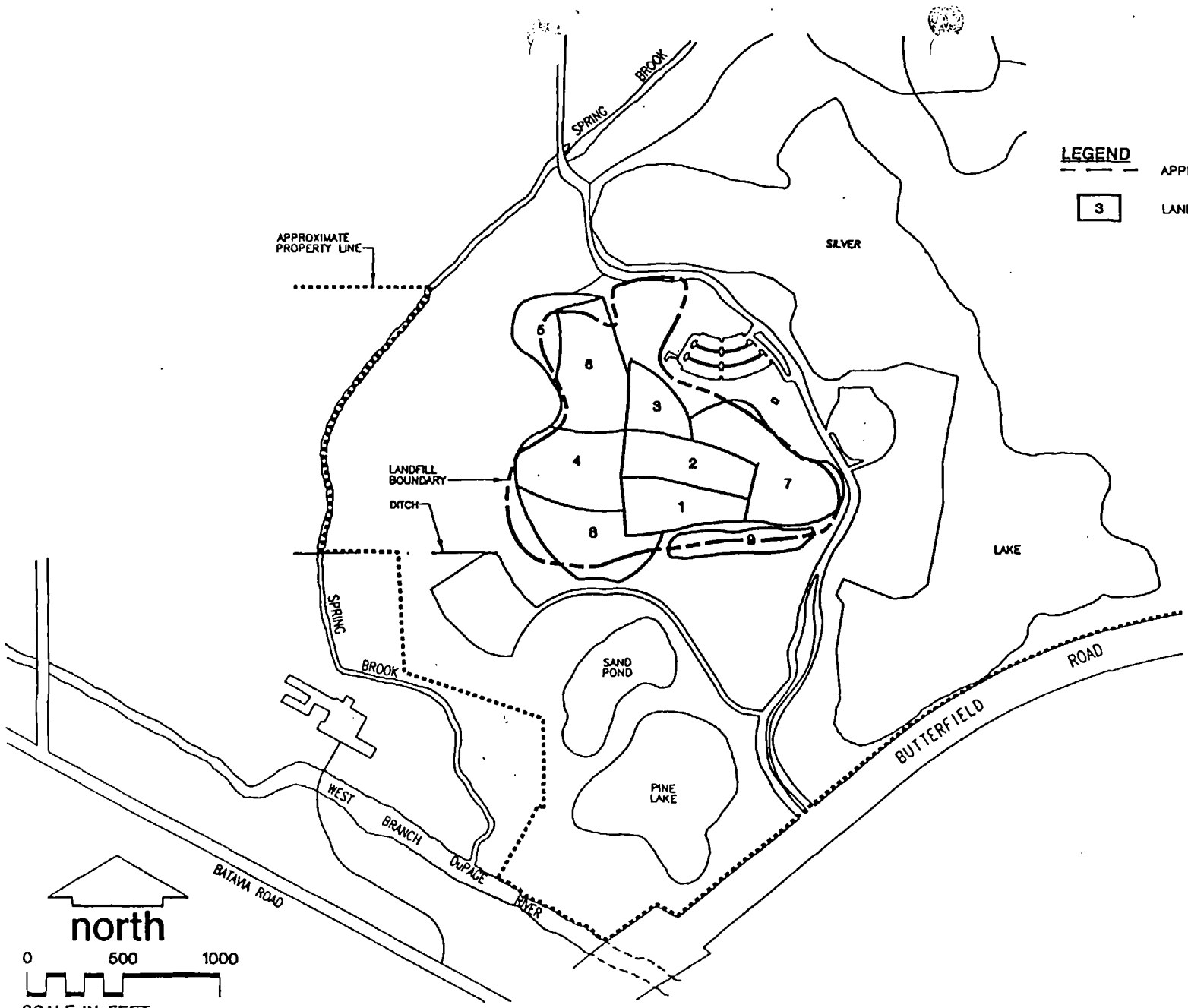
ALL MONITORING WELLS ARE SAMPLED ON A QUARTERLY BASIS

G-128
G-131
G-132
G-133
G-134
G-135
G-137
G-138
G-139
G-140
G-141
G-145
G-146

**LIST OF DEEP MONITORING WELLS REQUESTED BY USEPA AS PART OF
THE NATURAL ATTENUATION STUDY:**

G-132
G-134
G-138
G-139
G-140

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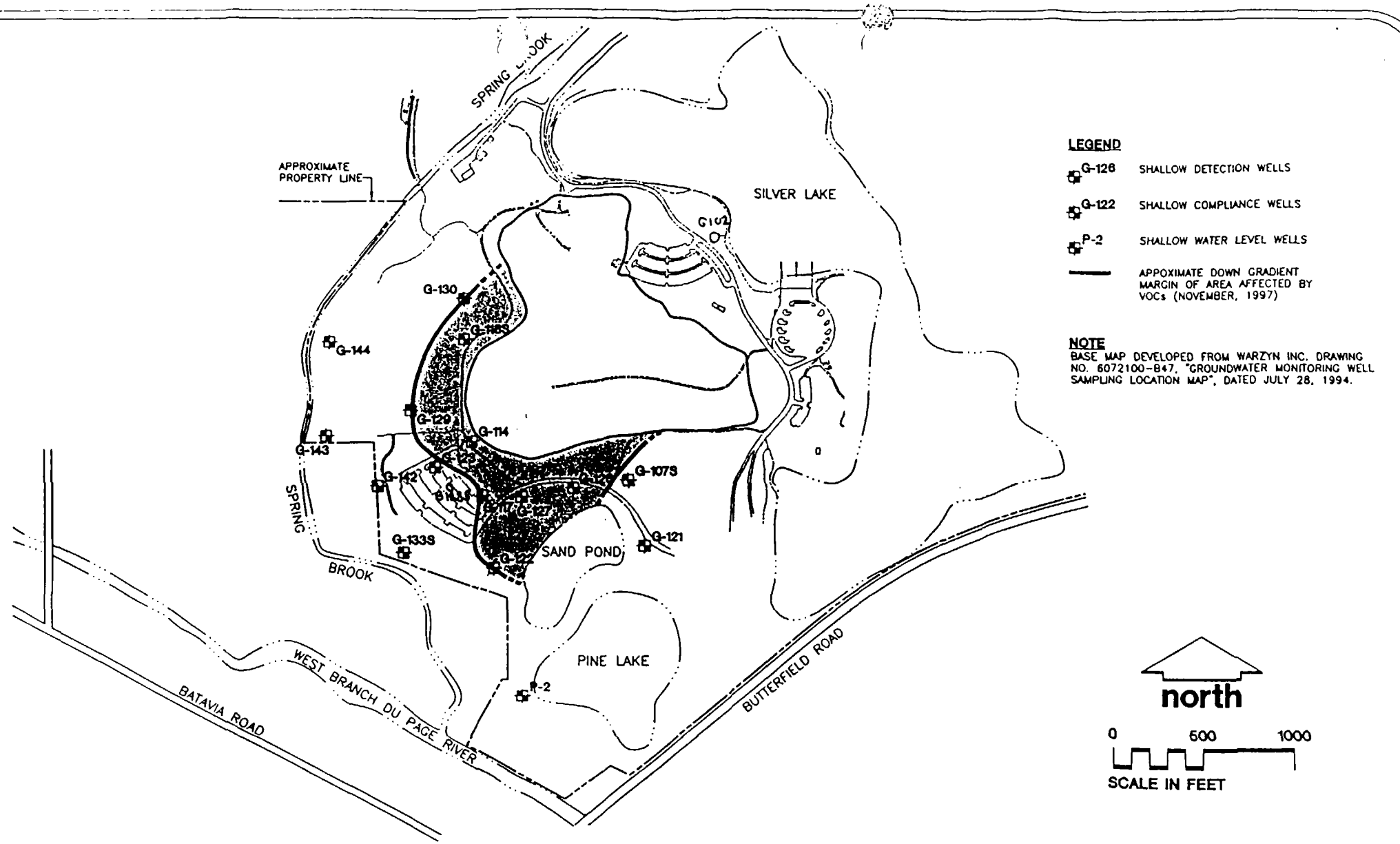
LEGEND

3

APPROXIMATE LIMIT OF FILL
LANDFILL CELL

ORIGINAL CELL CONFIGURATION	
REMEDIAL INVESTIGATION REPORT	
BLACKWELL LANDFILL SITE	
Du PAGE COUNTY, ILLINOIS	
Drawing Number 6072100 B4	WARZYN
Developed By JAW	Drawn By ELR
Approved By <i>Julie A. Yelkinson</i>	Date 7/28/94
Reference	Revisions

FIGURE 2-2



LEGEND

- G-128 SHALLOW DETECTION WELLS
- G-122 SHALLOW COMPLIANCE WELLS
- P-2 SHALLOW WATER LEVEL WELLS
- APPROXIMATE DOWN GRADIENT MARGIN OF AREA AFFECTED BY VOCs (NOVEMBER, 1997)

NOTE

BASE MAP DEVELOPED FROM WARZYN INC. DRAWING NO. 6072100-B47, "GROUNDWATER MONITORING WELL SAMPLING LOCATION MAP", DATED JULY 28, 1994.



0 500 1000
SCALE IN FEET



MONTGOMERY WATSON
Chicago, Illinois

FIGURE 1
UPPER AQUIFER WELL AND PIEZOMETER LOCATIONS
BLACKWELL LANDFILL NPL SITE
DU PAGE COUNTY, ILLINOIS

